acc. to 29 CFR 1910.1200 App D

Detail King Citrus Clean Wheel & Engine Cleaner

Version number: GHS 1.1 Date of compilation: 2021-09-23

SECTION 1: Identification

1.1 Product identifier

Trade name Detail King Citrus Clean Wheel & Engine Clean-

er

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses Tire and wheel cleaner

1.3 Details of the supplier of the safety data sheet

Detail King 947-A-Old Frankstown Rd. Pittsburgh, PA 15239

1-888-314-0847

nvacco@detailking.com

1.4 Emergency telephone number

Emergency information service USA 1.800.535.5053, INTL 1.352.323.3500 24 hour emergency number

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Section	Hazard class	Category	Hazard class and category	Hazard state- ment
A.2	skin corrosion/irritation	2	Skin Irrit. 2	H315
A.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318
A.4S	skin sensitization	1	Skin Sens. 1	H317

For full text of abbreviations: see SECTION 16.

2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

- Signal word danger

- Pictograms

GHS05, GHS07



- Hazard statements

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H318 Causes serious eye damage.

- Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 If on skin: Wash with plenty of water.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

P310 Immediately call a poison center/doctor. P321 Specific treatment (see on this label).

P362 Take off contaminated clothing and wash it before reuse.

United States: en Page: 1 / 18

acc. to 29 CFR 1910.1200 App D

Detail King Citrus Clean Wheel & Engine Cleaner

Version number: GHS 1.1 Date of compilation: 2021-09-23

- Precautionary statements

P363 Wash contaminated clothing before reuse.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- Hazardous ingredients for labelling

Orange oil, sweet, N,N-Diethoxylated-N-coco-N-methylammonium chloride, sodium metasilicate, anhydrous, Alcohols, C9-11 ethoxylated

2.3 Other hazards

Hazards not otherwise classified

Contains Orange oil, sweet. May produce an allergic reaction.

May be harmful if inhaled (GHS category 5: acutely toxic - inhalation).

Toxic to aquatic life with long lasting effects (GHS category 2: aquatic toxicity - acute and/or chronic).

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS
N,N-Diethoxylated-N-coco-N- methylammonium chloride	CAS No 61791-10-4	3-<12	Eye Dam. 1 / H318
sodium metasilicate, anhydrous	CAS No 6834-92-0	3-<12	Acute Tox. 4 / H302 Acute Tox. 3 / H331 Skin Corr. 1B / H314 Eye Dam. 1 / H318 STOT SE 3 / H335
Alcohols, C9-11 ethoxylated	CAS No 68439-46-3	1-<3	Acute Tox. 4 / H302 Acute Tox. 4 / H312 Eye Dam. 1 / H318
1-butoxypropan-2-ol	CAS No 5131-66-8	1-<3	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Flam. Liq. 4 / H227
amines, coco alkyldimethyl, N-ox- ides	CAS No 61788-90-7	1-<3	Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Eye Dam. 1 / H318
Orange oil, sweet	CAS No 8008-57-9 8028-48-6 68647-72-3	0.1-<1	Skin Irrit. 2 / H315 Skin Sens. 1 / H317 Asp. Tox. 1 / H304 Flam. Liq. 3 / H226
methanol	CAS No 67-56-1	0.1-<1	Acute Tox. 3 / H301 Acute Tox. 3 / H311 Acute Tox. 3 / H331 STOT SE 1 / H370 Flam. Liq. 2 / H225

Hazardous ingredients, Consideration of other advice

This table, if present, includes all GHS classified ingredients present above their cut-off limits, even if the finished product is not classified as hazardous by GHS.

Exact percentage of ingredients is withheld as a trade secret.

For full text of abbreviations: see SECTION 16.

United States: en Page: 2 / 18

acc. to 29 CFR 1910.1200 App D

Detail King Citrus Clean Wheel & Engine Cleaner

Version number: GHS 1.1 Date of compilation: 2021-09-23

SECTION 4: First-aid measures

4.1 Description of first-aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

United States: en Page: 3 / 18

acc. to 29 CFR 1910.1200 App D

Detail King Citrus Clean Wheel & Engine Cleaner

Version number: GHS 1.1 Date of compilation: 2021-09-23

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

- Handling of incompatible substances or mixtures

Do not mix with acids.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Control of the effects

Protect against external exposure, such as

Chaoifia and use

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

Coun try	Name of agent	CAS No	lden- tifier	TWA [ppm]	TWA [mg/ m³]	STEL [ppm]	STEL [mg/ m³]	Ceil- ing-C [ppm]	Ceil- ing-C [mg/ m³]	Nota tion	Sourc e
US	methanol	67-56-1	TLV®	200		250				Н	AC- GIH® 2019
US	methyl alcohol	67-56-1	REL	200 (10 h)	260 (10 h)	250	325				NIOS H REL

United States: en Page: 4 / 18

acc. to 29 CFR 1910.1200 App D

Detail King Citrus Clean Wheel & Engine Cleaner

Version number: GHS 1.1 Date of compilation: 2021-09-23

Occupational exposure limit values (Workplace Exposure Limits)

try	Name of agent	CAS NO	tifier	[ppm]	[mg/ m³]	[ppm]	[mg/ m³]	ing-C [ppm]	ing-C [mg/ m³]	tion	e
US	methyl alcohol	67-56-1	PEL	200	260						29 CFR 1910.1 000
US	methyl alcohol (methanol)	67-56-1	PEL (CA)	200	260	250	325	1,000			Cal/ OSHA PEL

Notation

Ceiling-C ceiling value is a limit value above which exposure should not occur

absorbed through the skin

short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified) STEL

time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified TWA

Biological limit values Country Name of agent **Parameter** Nota-**Identifier** Value Source tion ACGIH® 2019 US **BEI®** methanol methanol 15 mg/l

Relevant DNELs of components of the mixture							
Name of sub- stance	CAS No	End- point	Threshold level	Protection goal, route of expos- ure	Used in	Exposure time	
sodium metasilicate, anhydrous	6834-92-0	DNEL	6.2 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects	
sodium metasilicate, anhydrous	6834-92-0	DNEL	1.5 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects	
Alcohols, C9-11 eth- oxylated	68439-46-3	DNEL	2,080 mg/ kg	human, dermal	worker (industry)	chronic - systemic effects	
Alcohols, C9-11 eth- oxylated	68439-46-3	DNEL	294 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects	
1-butoxypropan-2-ol	5131-66-8	DNEL	44 mg/kg	human, dermal	worker (industry)	chronic - systemic effects	
1-butoxypropan-2-ol	5131-66-8	DNEL	270 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects	
amines, coco al- kyldimethyl, N-oxides	61788-90-7	DNEL	6.2 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects	
amines, coco al- kyldimethyl, N-oxides	61788-90-7	DNEL	11 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects	
Orange oil, sweet	8008-57-9 8028-48-6 68647-72-3	DNEL	8.9 mg/kg	human, dermal	worker (industry)	chronic - systemic effects	
Orange oil, sweet	8008-57-9 8028-48-6 68647-72-3	DNEL	31 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects	

United States: en Page: 5 / 18

acc. to 29 CFR 1910.1200 App D

Detail King Citrus Clean Wheel & Engine Cleaner

Version number: GHS 1.1 Date of compilation: 2021-09-23

Relevant DNELs o	Relevant DNELs of components of the mixture							
Name of sub- stance	CAS No	End- point	Threshold level	Protection goal, route of expos- ure	Used in	Exposure time		
Orange oil, sweet	8008-57-9 8028-48-6 68647-72-3	DNEL	186 μg/cm²	human, dermal	worker (industry)	acute - local effects		
methanol	67-56-1	DNEL	130 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects		
methanol	67-56-1	DNEL	130 mg/m ³	human, inhalatory	worker (industry)	acute - systemic ef- fects		
methanol	67-56-1	DNEL	130 mg/m ³	human, inhalatory	worker (industry)	chronic - local ef- fects		
methanol	67-56-1	DNEL	130 mg/m ³	human, inhalatory	worker (industry)	acute - local effects		
methanol	67-56-1	DNEL	20 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects		
methanol	67-56-1	DNEL	20 mg/kg bw/day	human, dermal	worker (industry)	acute - systemic ef- fects		

Relevant PNECs of components of the mixture

Name of sub- stance	CAS No	End- point	Threshold level	Organism	Environmental compartment	Exposure time
Alcohols, C9-11 eth- oxylated	68439-46-3	PNEC	0.1 ^{mg} / _I	aquatic organisms	freshwater	short-term (single instance)
Alcohols, C9-11 eth- oxylated	68439-46-3	PNEC	0.1 ^{mg} / _l	aquatic organisms	marine water	short-term (single instance)
Alcohols, C9-11 eth- oxylated	68439-46-3	PNEC	1.4 ^{mg} / _l	microorganisms	sewage treatment plant (STP)	short-term (single instance)
Alcohols, C9-11 eth- oxylated	68439-46-3	PNEC	14 ^{mg} / _{kg}	benthic organisms	sediment	short-term (single instance)
Alcohols, C9-11 eth- oxylated	68439-46-3	PNEC	14 ^{mg} / _{kg}	pelagic organisms	sediment	short-term (single instance)
Alcohols, C9-11 eth- oxylated	68439-46-3	PNEC	1 ^{mg} / _{kg}	terrestrial organ- isms	soil	short-term (single instance)
Alcohols, C9-11 eth- oxylated	68439-46-3	PNEC	0.014 ^{mg} / _l	aquatic organisms	water	intermittent release
1-butoxypropan-2-ol	5131-66-8	PNEC	0.53 ^{mg} / _I	aquatic organisms	freshwater	short-term (single instance)
1-butoxypropan-2-ol	5131-66-8	PNEC	0.053 ^{mg} / _l	aquatic organisms	marine water	short-term (single instance)
1-butoxypropan-2-ol	5131-66-8	PNEC	10 ^{mg} / _l	microorganisms	sewage treatment plant (STP)	short-term (single instance)
1-butoxypropan-2-ol	5131-66-8	PNEC	2.4 ^{mg} / _{kg}	benthic organisms	sediment	short-term (single instance)
1-butoxypropan-2-ol	5131-66-8	PNEC	0.16 ^{mg} / _{kg}	terrestrial organ- isms	soil	short-term (single instance)
1-butoxypropan-2-ol	5131-66-8	PNEC	5.3 ^{mg} / _l	aquatic organisms	water	intermittent release
1-butoxypropan-2-ol	5131-66-8	PNEC	0.24 ^{mg} / _{kg}	pelagic organisms	sediment	short-term (single instance)

United States: en Page: 6 / 18

acc. to 29 CFR 1910.1200 App D

Detail King Citrus Clean Wheel & Engine Cleaner

Version number: GHS 1.1 Date of compilation: 2021-09-23

Relevant PNECs of components of the mixture							
Name of sub- stance	CAS No	End- point	Threshold level	Organism	Environmental compartment	Exposure time	
amines, coco al- kyldimethyl, N-oxides	61788-90-7	PNEC	0.034 ^{mg} / _l	aquatic organisms	freshwater	short-term (single instance)	
amines, coco al- kyldimethyl, N-oxides	61788-90-7	PNEC	0.003 ^{mg} / _l	aquatic organisms	marine water	short-term (single instance)	
amines, coco al- kyldimethyl, N-oxides	61788-90-7	PNEC	0.034 ^{mg} / _l	aquatic organisms	water	intermittent release	
amines, coco al- kyldimethyl, N-oxides	61788-90-7	PNEC	24 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)	
amines, coco al- kyldimethyl, N-oxides	61788-90-7	PNEC	5.2 ^{mg} / _{kg}	aquatic organisms	freshwater sediment	short-term (single instance)	
amines, coco al- kyldimethyl, N-oxides	61788-90-7	PNEC	0.52 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single instance)	
amines, coco al- kyldimethyl, N-oxides	61788-90-7	PNEC	1 ^{mg} / _{kg}	terrestrial organ- isms	soil	short-term (single instance)	
Orange oil, sweet	8008-57-9 8028-48-6 68647-72-3	PNEC	5.4 ^{μg} / _l	aquatic organisms	freshwater	short-term (single instance)	
Orange oil, sweet	8008-57-9 8028-48-6 68647-72-3	PNEC	0.54 ^{µg} / _I	aquatic organisms	marine water	short-term (single instance)	
Orange oil, sweet	8008-57-9 8028-48-6 68647-72-3	PNEC	2.1 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)	
Orange oil, sweet	8008-57-9 8028-48-6 68647-72-3	PNEC	1.3 ^{mg} / _{kg}	aquatic organisms	freshwater sediment	short-term (single instance)	
Orange oil, sweet	8008-57-9 8028-48-6 68647-72-3	PNEC	0.13 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single instance)	
Orange oil, sweet	8008-57-9 8028-48-6 68647-72-3	PNEC	44 ^{mg} / _{kg}	aquatic organisms	water	short-term (single instance)	
Orange oil, sweet	8008-57-9 8028-48-6 68647-72-3	PNEC	0.26 ^{mg} / _{kg}	terrestrial organ- isms	soil	short-term (single instance)	
Orange oil, sweet	8008-57-9 8028-48-6 68647-72-3	PNEC	5.8 ^{μg} / _l	aquatic organisms	water	intermittent release	
methanol	67-56-1	PNEC	100 ^{mg} / _l	microorganisms	sewage treatment plant (STP)	short-term (single instance)	
methanol	67-56-1	PNEC	77 ^{mg} / _{kg}	benthic organisms	sediment	short-term (single instance)	
methanol	67-56-1	PNEC	7.7 ^{mg} / _{kg}	pelagic organisms	sediment	short-term (single instance)	
methanol	67-56-1	PNEC	1,540 ^{mg} / _l	aquatic organisms	water	intermittent release	
methanol	67-56-1	PNEC	21 ^{mg} / _l	aquatic organisms	freshwater	short-term (single instance)	
methanol	67-56-1	PNEC	2.1 ^{mg} / _l	aquatic organisms	marine water	short-term (single instance)	

United States: en Page: 7 / 18

acc. to 29 CFR 1910.1200 App D

Detail King Citrus Clean Wheel & Engine Cleaner

Version number: GHS 1.1 Date of compilation: 2021-09-23

Relevant PNECs of components of the mixture								
Name of sub- stance	CAS No	End- point	Threshold level	Organism	Environmental compartment	Exposure time		
methanol	67-56-1	PNEC	100 ^{mg} / _l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)		
methanol	67-56-1	PNEC	77 ^{mg} / _{kg}	aquatic organisms	freshwater sediment	short-term (single instance)		
methanol	67-56-1	PNEC	7.7 ^{mg} / _{kg}	aquatic organisms	marine sediment	short-term (single instance)		
methanol	67-56-1	PNEC	100 ^{mg} / _{kg}	terrestrial organ- isms	soil	short-term (single instance)		

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Color	orange
Particle	not relevant (liquid)
Odor	citrus

United States: en Page: 8 / 18

acc. to 29 CFR 1910.1200 App D

Detail King Citrus Clean Wheel & Engine Cleaner

Version number: GHS 1.1 Date of compilation: 2021-09-23

Other safety parameters

pH (value)	13 - 13 (25 °C) (base)
Melting point/freezing point	not determined
Initial boiling point and boiling range	100 °C
Flash point	>100 °C at 961 mbar closed cup
Evaporation rate	Not determined
Flammability (solid, gas)	not relevant, (fluid)
Vapor pressure	32 hPa at 25 °C
Density	1 ^g / _{cm³}
Vapor density	this information is not available

Solubility(ies)

- Water solubility	miscible in any proportion
--------------------	----------------------------

Partition coefficient

- n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	260 °C
Viscosity	not determined
Explosive properties	none
Oxidizing properties	none
Temperature class (USA, acc. to NEC 500)	T2C (maximum permissible surface temperature on the equipment: 230°C)

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

Oxidizers

Release of flammable materials with:

Light metals (due to the release of hydrogen in an acid/alkaline medium)

United States: en Page: 9 / 18

acc. to 29 CFR 1910.1200 App D

Detail King Citrus Clean Wheel & Engine Cleaner

Version number: GHS 1.1 Date of compilation: 2021-09-23

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Shall not be classified as acutely toxic.

GHS of the United Nations, annex 4: May be harmful if inhaled.

Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
sodium metasilicate, anhydrous	6834-92-0	oral	1,349 ^{mg} / _{kg}
sodium metasilicate, anhydrous	6834-92-0	inhalation: vapor	>2.1 ^{mg} / _l /4h
sodium metasilicate, anhydrous	6834-92-0	inhalation: dust/mist	0.5 ^{mg} / _l /4h
Alcohols, C9-11 ethoxylated	68439-46-3	oral	1,200 ^{mg} / _{kg}
Alcohols, C9-11 ethoxylated	68439-46-3	dermal	2,000 ^{mg} / _{kg}
methanol	67-56-1	oral	100 ^{mg} / _{kg}

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

May cause an allergic skin reaction.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

United States: en Page: 10 / 18

acc. to 29 CFR 1910.1200 App D

Detail King Citrus Clean Wheel & Engine Cleaner

Version number: GHS 1.1 Date of compilation: 2021-09-23

SECTION 12: Ecological information

12.1 Toxicity

Toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute) of components of the mixture

-1	-,				
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
sodium metasilicate, an- hydrous	6834-92-0	LC50	310 ^{mg} / _l	fish	96 h
sodium metasilicate, an- hydrous	6834-92-0	EC50	1,700 ^{mg} / _l	aquatic invertebrates	48 h
Alcohols, C9-11 eth- oxylated	68439-46-3	LC50	8.5 ^{mg} / _l	fathead minnow	96 h
Alcohols, C9-11 eth- oxylated	68439-46-3	EC50	5.3 ^{mg} / _l	daphnia magna	48 h
Alcohols, C9-11 eth- oxylated	68439-46-3	ErC50	1 – 10 ^{mg} / _l	algae	96 h
1-butoxypropan-2-ol	5131-66-8	EC50	>1,000 ^{mg} / _I	aquatic invertebrates	48 h
amines, coco al- kyldimethyl, N-oxides	61788-90-7	LC50	134 ^{mg} / _I	fish	96 h
amines, coco al- kyldimethyl, N-oxides	61788-90-7	EC50	3.9 ^{mg} / _l	aquatic invertebrates	48 h
amines, coco al- kyldimethyl, N-oxides	61788-90-7	ErC50	0.86 ^{mg} / _l	algae	72 h
Orange oil, sweet	8008-57-9 8028-48-6 68647-72-3	LL50	5.7 ^{mg} / _l	fish	96 h
Orange oil, sweet	8008-57-9 8028-48-6 68647-72-3	EL50	1.4 ^{mg} / _I	aquatic invertebrates	24 h
methanol	67-56-1	LC50	15,400 ^{mg} / _I	fish	96 h
methanol	67-56-1	EC50	12,700 ^{mg} / _l	fish	96 h
methanol	67-56-1	ErC50	22,000 ^{mg} / _l	algae	96 h

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
sodium metasilicate, an- hydrous	6834-92-0	EC50	>100 ^{mg} / _l	microorganisms	3 h
1-butoxypropan-2-ol	5131-66-8	EC50	>1,000 ^{mg} / _I	microorganisms	3 h
amines, coco al- kyldimethyl, N-oxides	61788-90-7	LC50	0.87 ^{mg} / _l	fish	120 d
amines, coco al- kyldimethyl, N-oxides	61788-90-7	EC50	0.88 ^{mg} / _l	aquatic invertebrates	21 d

12.2 Persistence and degradability

Data are not available.

United States: en Page: 11 / 18

acc. to 29 CFR 1910.1200 App D

Detail King Citrus Clean Wheel & Engine Cleaner

Version number: GHS 1.1 Date of compilation: 2021-09-23

Bioaccumulative potential 12.3

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

Endocrine disrupting properties 12.6

None of the ingredients are listed.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1	UN number	not subject to transport regulations
14.2	UN proper shipping name	not relevant
14.3	Transport hazard class(es)	not assigned
14.4	Packing group	not assigned

Environmental hazards 14.5 non-environmentally hazardous acc. to the dangerous

goods regulations

14.6 Special precautions for user

There is no additional information.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information Not subject to transport regulations.

International Maritime Dangerous Goods Code (IMDG) - Additional information Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Not subject to ICAO-IATA.

United States: en Page: 12 / 18

acc. to 29 CFR 1910.1200 App D

Detail King Citrus Clean Wheel & Engine Cleaner

Version number: GHS 1.1 Date of compilation: 2021-09-23

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question National regulations (United States)

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

- Specific Toxic Chemical Listings (EPCRA Section 313)

Toxics Release Inventory: Specific Toxic Chemical Listings

Name of substance

CAS No

Remarks

Effective date

1986-12-31

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

Name of substance	CAS No	Remarks	Statutory code	Final RQ pounds (Kg)
methanol	67-56-1		3 4	5000 (2270)

Legend

3 "3" indicates that the source is section 112 of the Clean Air Act

Clean Air Act

none of the ingredients are listed

Right to Know Hazardous Substance List

- Cleaning Product Right to Know Act Substance List (CA-RTK)

Name of substance	CAS No	Functionality	Authoritative Lists
water	7732-18-5	solvent	
N,N-Diethoxylated-N-coco-N-methylammoni- um chloride	61791-10-4	surfactant	
sodium metasilicate, anhydrous	6834-92-0	cleaning agent	
Alcohols, C9-11 ethoxylated	68439-46-3	surfactant	
acrylic polymer	75760-37-1	viscosity modifier	
1-butoxypropan-2-ol	5131-66-8	co-solvent	
amines, coco alkyldimethyl, N-oxides	61788-90-7	surfactant	
disodium cocoamphodipropionate	68604-71-7	surfactant	
EDTA, anhydrous	64-02-8	chelate / se- questrant	
Orange oil, sweet	8008-57-9 8028-48-6 68647-72-3	fragrance	
methanol	67-56-1	alcohols	CA TACs NTP OHAT - Repr. or Dev. Toxicants OEHHA RELs Prop 65

United States: en Page: 13 / 18

^{4 &}quot;4" indicates that the source is section 3001 of the Resource Conservation and Recovery Act (RCRA)

acc. to 29 CFR 1910.1200 App D

Detail King Citrus Clean Wheel & Engine Cleaner

Version number: GHS 1.1 Date of compilation: 2021-09-23

Name of substance	CAS No	Functionality	Authoritative Lists
trisodium nitrilotriacetate, anhydrous	5064-31-3	chelate / se- questrant	
Decanal	112-31-2	fragrance	
cocoyl hydroxyethylimidazoline	61791-38-6	non-functional con- stituent	
sodium hydroxide	1310-73-2	pH adjusting agent	OEHHA RELs

- Toxic or Hazardous Substance List (MA-TURA)

Name of substance	CAS No	DEP CODE	PBT / HHS / LHS	PBT / HHS Threshol d	De Minimis Con- centration Threshold
methanol	67-56-1				1.0 %

- Hazardous Substance List (NJ-RTK)

Name of substance	CAS No	Remarks	Classifications
methanol	67-56-1		TE F3

Legend

F3 TE Flammable - Third Degree

Teratogenic

- Hazardous Substance List (Chapter 323) (PA-RTK)

Name acc. to inventory	CAS No	Classification
METHANOL	67-56-1	E

Legend

Environmental hazard

- Hazardous Substance List (RI-RTK)

Name of substance	CAS No	References
methanol	67-56-1	T, F

Legend

Flammability (NFPA®) Toxicity (ACGIH®)

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and **Toxic Enforcement Act of 1987**

Proposition 65 List of chemicals					
Name of substance	Name acc. to inventory	CAS No	Wt%	Remarks	Type of the tox-icity
methanol	methanol	67-56-1	0.12		develop- mental

VOC content

- Regulated Volatile Organic Compounds (VOC-EPA) 3 %

- Regulated Volatile Organic Compounds (VOC-Cal ARB) 3 %

United States: en Page: 14 / 18

acc. to 29 CFR 1910.1200 App D

Detail King Citrus Clean Wheel & Engine Cleaner

Version number: GHS 1.1 Date of compilation: 2021-09-23

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category	Rating	Description
Chronic	*	chronic (long-term) health effects may result from repeated overexposure
Health	3	major injury likely unless prompt action is taken and medical treatment is given
Flammability	1	material that must be preheated before ignition can occur
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	1	material that must be preheated before ignition can occur
Health	3	material that, under emergency conditions, can cause serious or permanent injury
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

National inventories

Country	Inventory	Status
CA	DSL	not all ingredients are listed
EU	REACH Reg.	not all ingredients are listed
US	TSCA	not all ingredients are listed

Legend

DSL Domestic Substances List (DSL)
REACH Reg. REACH registered substances
TSCA Toxic Substance Control Act

15.2 Chemical Safety Assessment

 $Chemical\ safety\ assessments\ for\ substances\ in\ this\ mixture\ were\ not\ carried\ out.$

SECTION 16: Other information, including date of preparation or last revision

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
29 CFR 1910.1000	29 CFR 1910.1000, Tables Z-1, Z-2, Z-3 - Occupational Safety and Health Standards: Toxic and Hazardous Substances (permissible exposure limits)
49 CFR US DOT	49 CFR U.S. Department of Transportation
ACGIH®	American Conference of Governmental Industrial Hygienists
ACGIH® 2019	From ACGIH®, 2019 TLVs® and BEIs® Book. Copyright 2019. Reprinted with permission. Information on the proper use of the TLVs® and BEIs®: http://www.acgih.org/tlv-bei-guidelines/policies-procedures-presentations/tlv-bei-position-statement

United States: en Page: 15 / 18

acc. to 29 CFR 1910.1200 App D

Detail King Citrus Clean Wheel & Engine Cleaner

Version number: GHS 1.1 Date of compilation: 2021-09-23

Abbr.	Descriptions of used abbreviations
Acute Tox.	Acute toxicity
Asp. Tox.	Aspiration hazard
ATE	Acute Toxicity Estimate
Cal/OSHA PEL	California Division of Occupational Safety and Health (Cal/OSHA): Permissible Exposure Limits (PELs)
Cal ARB	California Air Resources Board
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
DEP CODE	Department of Environmental Protection Code
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EL50	Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce a response in 50% of the test organisms
EPA	Environmental Protection Agency. An agency of the federal government of the United States charged with protecting human health and the environment
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
HHS	Higher hazard substance
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LHS	Lower hazard substance
LL50	Lethal Loading 50 %: the LL50 corresponds to the loading rate causing 50 % lethality
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NFPA®	National Fire Protection Association (United States)
NIOSH REL	National Institute for Occupational Safety and Health (NIOSH): Recommended Exposure Limits (RELs)
NPCA-HMIS® III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
PEL	Permissible exposure limit
PNEC	Predicted No-Effect Concentration

United States: en Page: 16 / 18

acc. to 29 CFR 1910.1200 App D

Detail King Citrus Clean Wheel & Engine Cleaner

Version number: GHS 1.1 Date of compilation: 2021-09-23

Abbr.	Descriptions of used abbreviations
ppm	Parts per million
RTECS	Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitization
STEL	Short-term exposure limit
STOT SE	Specific target organ toxicity - single exposure
TLV®	Threshold Limit Values
TWA	Time-weighted average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H227	Combustible liquid.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H370	Causes damage to organs.

United States: en Page: 17 / 18

acc. to 29 CFR 1910.1200 App D

Detail King Citrus Clean Wheel & Engine Cleaner

Version number: GHS 1.1 Date of compilation: 2021-09-23

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

United States: en Page: 18 / 18